

In the Claims

1. (Canceled)

2. (New) An electrostatic circuit for footwear having an outsole, an insole and a midsole between the insole and outsole, said electrostatic circuit comprising:

a conductor path having a first end and a second end;

a conductive pad attached to said first end of said conductor path;

said conductive pad being attachable to one of said outsole and said insole;

said second end of said conductive path being attachable to the other of said outsole and said insole;

an at least one resistor electrically coupled to said conductive path between said first and second ends thereof.

3. (New) The electrostatic circuit of claim 2 wherein the total impedance provided by said resistors is less than or equal to 10^7 ohms.

4. (New) The electrostatic circuit of claim 2 wherein said conductive pad is fabricated from conductive EVA.

5. (New) The electrostatic circuit of claim 2 wherein said first end of said conductive path is stitched to said conductive pad.

6. (New) An electrostatic circuit for footwear having an outsole, an insole and a midsole between the insole and outsole, said electrostatic circuit comprising:

a conductor path having a first end and a second end;

a conductive pad attached to said second end of said conductor path;

said conductive pad being attachable to one of said outsole and said insole;

said first end of said conductive path being attachable to the other of said outsole and said insole; and

at least one resistor electrically coupled to said conductive path between said first and second ends thereof.

7. (New) The electrostatic circuit of claim 6 wherein the total impedance provided by said resistors is less than or equal to 10^7 ohms.

8. (New) The electrostatic circuit of claim 6 wherein said conductive pad is fabricated from conductive EVA.

9. (New) The electrostatic circuit of claim 6 wherein said first end of said conductive path is stitched to said conductive pad.

10. (New) A sole for a conductive shoe, said sole comprising:
an outsole;
a midsole adjacent said outsole;
an insole adjacent said midsole; and
a conductive path having a first end and a second end, said first end attached to a conductive pad, said conductive pad attached to said outsole and said second end of said conductive path attached to said insole; and
at least one resistor electrically coupled to each said conductive path.

11. (New) The sole of claim 10 further comprising a sock liner adjacent said insole.

12. (New) The sole of claim 10 wherein said outsole is fabricated from material selected from the group consisting of polyurethane and rubber.

13. (New) The sole of claim 10 wherein said outsole has an electrical resistance value of less than 1×10^6 ohms.

14. (New) The sole of claim 10 wherein said midsole is fabricated from material selected from the group of polyurethane and EVA.

15. (New) The sole of claim 10 wherein said midsole has an electrical resistance value of greater than 1×10^7 ohms.

16. (New) The sole of claim 10 wherein one side of said outsole has a tread pattern thereon.

17. (New) The sole of claim 10 wherein said conductive pad is stitched to said first end of said conductive path.

18. (New) A sole for a conductive shoe, said sole comprising:
an outsole;
a midsole adjacent said outsole;
an insole adjacent said midsole; and
a conductive path having a first end and a second end, said second end attached to a conductive pad, said conductive pad attached to said insole and said first end of said conductive path attached to said outsole; and
at least one resistor electrically coupled to each said conductive path.

19. (New) The sole of claim 18 further comprising a sock liner adjacent said insole.

20. (New) The sole of claim 18 wherein said outsole is fabricated from material selected from the group consisting of polyurethane and rubber.

21. (New) The sole of claim 18 wherein said outsole has an electrical resistance value of less than 1×10^6 ohms.

22. (New) The sole of claim 18 wherein said midsole is fabricated from material selected from the group of polyurethane and EVA.

23. (New) The sole of claim 18 wherein said midsole has an electrical resistance value of greater than 1×10^7 ohms.

24. (New) The sole of claim 18 wherein one side of said outsole has a tread pattern thereon.

25. (New) The sole of claim 18 wherein said conductive pad is stitched to said second end of said conductive path.

26. (New) A method for applying a desired amount of electrical impedance to an electrostatic current passing through a shoe having an outsole, an insole and a midsole between the outsole and insole, said method comprising:

extending a conductive path having two ends and a resistor between the outsole and the insole;

affixing one end of the conductive path to a conductive pad;

affixing the conductive pad to the insole; and

affixing another end of the conductive path to the outsole.

27. (New) The method of claim 27 wherein the conductive path extends through an opening in the midsole.

28. (New) A method for applying a desired amount of electrical impedance to an electrostatic current passing through a shoe having an outsole, an insole and a midsole between the outsole and insole, said method comprising:

extending a conductive path having two ends and a resistor between the outsole and the insole;

affixing one end of the conductive path to a conductive pad;

affixing the conductive pad to the outsole; and

affixing another end of the conductive path to the insole.

29. (New) The method of claim 28 wherein the conductive path extends through an opening in the midsole.

30. (New) An electrostatic circuit for a sole comprising:
a conductive path having a first end and a second end and at least one resistor located between the first end and second ends; and
a conductive attachment pad assembly attached to one of said first and second ends of said conductive path.